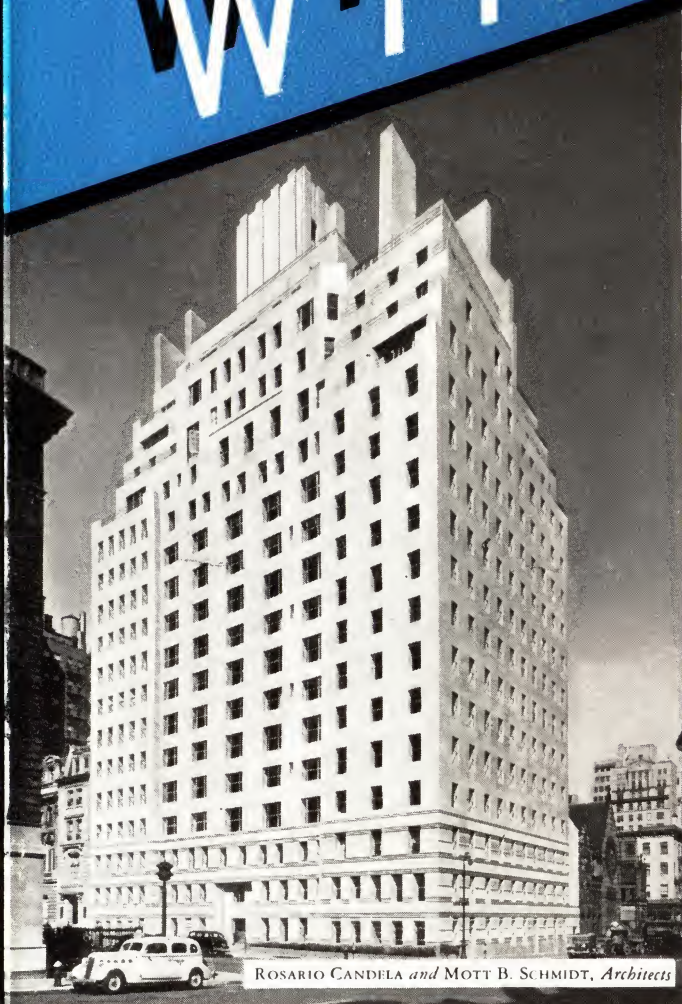




WINDOWS



ROSARIO CANDELA and MOTT B. SCHMIDT, Architects



CASS GILBERT, Architect Photo © Wurts Bros., N.Y.

BRONZE OR
ALUMINUM

•
CASEMENT OR
DOUBLE HUNG



GENERAL BRONZE CORPORATION

34-19 TENTH STREET

LONG ISLAND CITY, N.Y.

WINDOWS BY GENERAL BRONZE

(PEREMI PATENTS)

(POLACHEK PATENTS)

BRONZE, ALUMINUM, STAINLESS STEEL

Permatite Double Hung	—Pages 3, 6, 8, 9, 10	Permatite Hardware	—Page 5
Permatite Pivoted	—Page 3	Polachek—For heavy duty required in extra large and monumental buildings—	Pages 12-15
Permatite Casement	—Pages 4, 5, 7, 8, 10, 11	Polachek Double Hung	—Pages 12, 15
Permatite Projected	—Page 4	Polachek Casement	—Pages 12-14
Permatite Reversible	—Page 4	Polachek Casement Doors	—Page 14
Permatite Doors, Transoms, Sidelights, Basement and Utility Windows	—Page 5		

For residences, apartment houses and public buildings—where economical maintenance, high efficiency and low first cost are of equal importance

OUTSTANDING FEATURES

Sturdy, all-metal construction

—no felt or rubber to harden or deteriorate.

Continuous resilient weatherstripping

—of special metal alloy; insuring a completely air- and water-tight seal throughout the entire perimeter of sash.

Seamless tubular construction

—with solidly reinforced corners; sash will never sag or get out of alignment with frames.

All parts extruded

—no sheet metal used on any window shown in this catalog.

Continuous glazing key

—around glass opening; receives and keys glazing compound to its bed; protects from weather deterioration.

Specially designed hardware

—sturdy, smooth-operating, of solid bronze, finished to match windows; built to last a lifetime.

No rusting, no painting, no upkeep

—will not wear out; require no replacements; do not leak air; reduce fuel and air-conditioning bills; eliminate drafts and cold spots.

Narrow sash and frame members

—increase glass area; admit more light without increasing window size.

No dirt pockets

—in sash or frame; weatherstrip seals frame rebates when windows are open.

Heavy sub-frame

—of steel (or non-ferrous metal, if desired)—with integrally formed weatherfin; completely encircling window; insulated from bronze or aluminum frame.

LABORATORY TESTS FOR AIR INFILTRATION

Permatite Windows—both casement and double hung—were tested for air infiltration in the Laboratory of the Daniel Guggenheim School of Aeronautics, at New York University. The casement windows failed to register any measurable amount of air infiltration, even at a wind velocity of 40 miles

per hour. The double hung windows—at 40 miles per hour wind velocity—registered an air infiltration of 0.4 of a cubic foot per minute—less than one-third of the air leakage allowed by Government specifications for a wind velocity of only 25 miles per hour.



GENERAL BRONZE CORPORATION

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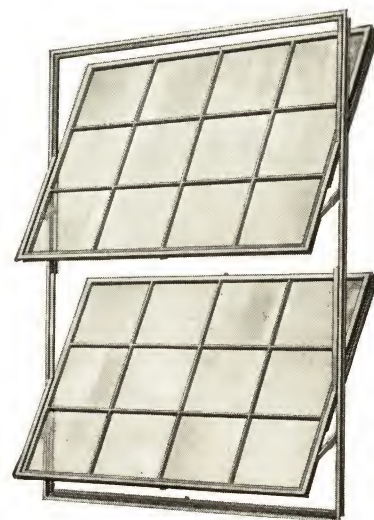


DOUBLE HUNG WINDOWS

Of all types of windows, the Double Hung is unquestionably the most universally usable. Tubular construction—in Permatite Windows—provides the maximum of strength with the maximum of glass area. Resilient metal weatherstrips form a continuous, positive air seal around the entire sash perimeter. For details, Pages 6 and 8. For specifications, Pages 9 and 10. Permatite Double Hung Windows are made in many standard sizes (Page 9) and in other sizes to order. Muntins may be omitted or arranged as preferred.

PIVOTED WINDOWS

This type of window combines the advantages of 100% ventilation with obvious ease of cleaning. Hardware, with the exception of the lock, is concealed within the frame members. All the outstanding features of Permatite Windows listed at the left, are embodied in these Pivoted Windows. Muntins may be omitted or arranged as preferred. Write for full size details and specifications for any type of building and building construction.



OF SPECIAL IMPORTANCE . . . This catalog presents but a few of the various types of General Bronze Windows. We invite you to take up with us your window problems, when we may also inform you as to further additions to our line.

Permatite Windows are made in standard, heavy and extra heavy weights—for a wide range of installations in residences, apartment houses, schools and institutional buildings.

Polachek Windows meet the need for extra heavy duty in very large and monumental buildings. Complete details for any installation of windows, doors, transoms and sidelights will be supplied on request.



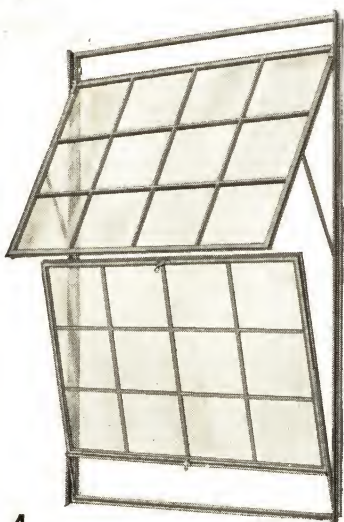


CASEMENT WINDOWS

Permatite Casement Windows offer the greatest variety in treatment. In appearance these windows contribute to architectural design, whether viewed from within or without. Combining easy operation and sure, tight closing, they provide lasting satisfaction. All sash rails are of seamless tubing; extruded members are further processed by drawing through forming dies to insure absolute accuracy. Specifications for Casement Windows are given on Pages 10 and 11; details on Pages 7 and 8; standard sizes on Page 11. In addition to the standard sizes shown, Permatite Casement Windows are made in other sizes to order. Muntins may be omitted or arranged as preferred.

PROJECTED WINDOWS

School Boards have shown a strong preference for the projected type window. With a shade fastened to the sash, this window serves as its own awning. Easy adjustment permits maximum openings, or any degree of ventilation. Narrow members, due to sturdy tubular construction, insure maximum light. Muntins may be omitted or arranged as preferred. Write for full size details and specifications for any type of building and building construction.

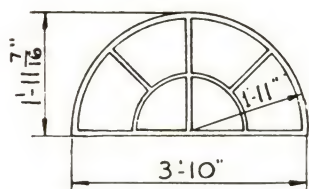


REVERSIBLE WINDOWS

The illustration shows the upper sash open for ventilation and the lower sash in reversed position for cleaning. Both sashes may be in the same position at the same time. This type of window is likewise popular with School Boards, largely on the theory that the reversible feature reduces the risk of persons falling out. Ease in cleaning is obvious. Hardware is extremely rigid and easy to operate in all kinds of weather. Muntins may be omitted or arranged as preferred. Write for full size details and specifications for any type of building and building construction.



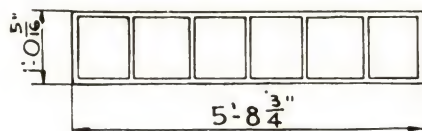
DOORS, TRANSOMS & SIDELIGHTS



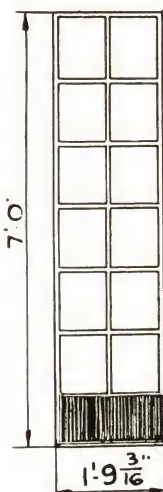
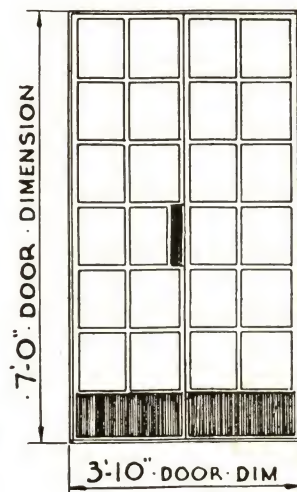
CH-4-D TRANSOM

All the features of Permatite design and construction are embodied in Permatite Casement Doors, Transoms and Sidelights. These are available in aluminum or bronze. On doors,

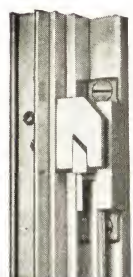
the weatherstripping is so arranged that the air seal contacts between door and frame are continued across the sill; completely eliminating water blowing through beneath the door . . . Completing a full range of architectural requirements, General Bronze similarly offers Basement and Utility Windows and Bottom Ventilators of Permatite construction.



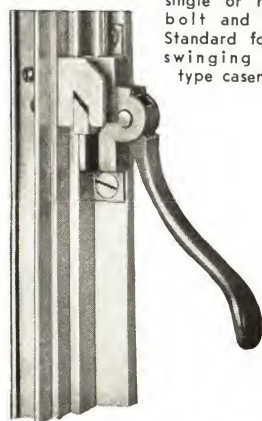
61 D TRANSOM

27-D
SIDELIGHTSTANDARD DOOR
STOCK SIZE

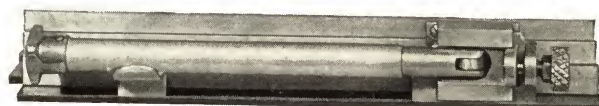
WINDOW HARDWARE



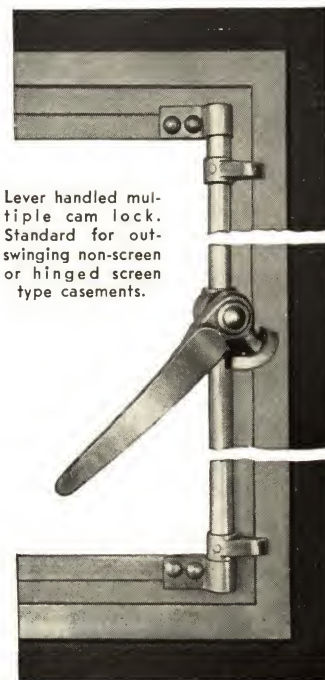
Lever handled locking device with single or multiple bolt and keeper. Standard for out-swinging screen type casements.



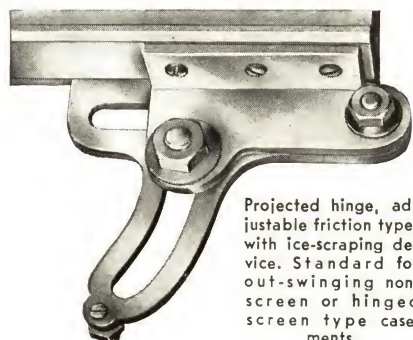
Worm and gear sash operator. Standard for out-swinging screen type casements.



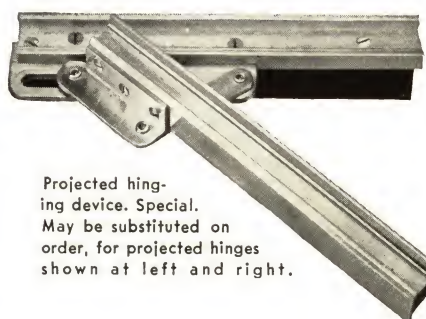
Telescoping bar sash adjuster with positive locking device. Standard for out-swinging screen type casements over bottom ventilator sash.



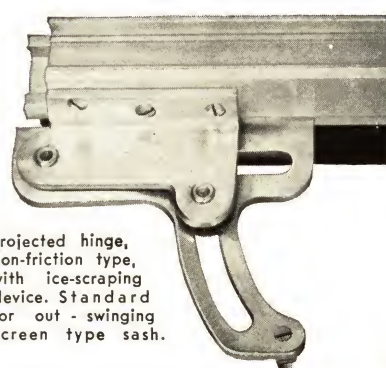
Lever handled multiple cam lock. Standard for out-swinging non-screen or hinged screen type casements.



Projected hinge, adjustable friction type, with ice-scraping device. Standard for out-swinging non-screen or hinged screen type casements.



Projected hinging device. Special. May be substituted on order, for projected hinges shown at left and right.



Projected hinge, non-friction type, with ice-scraping device. Standard for out-swinging screen type sash.

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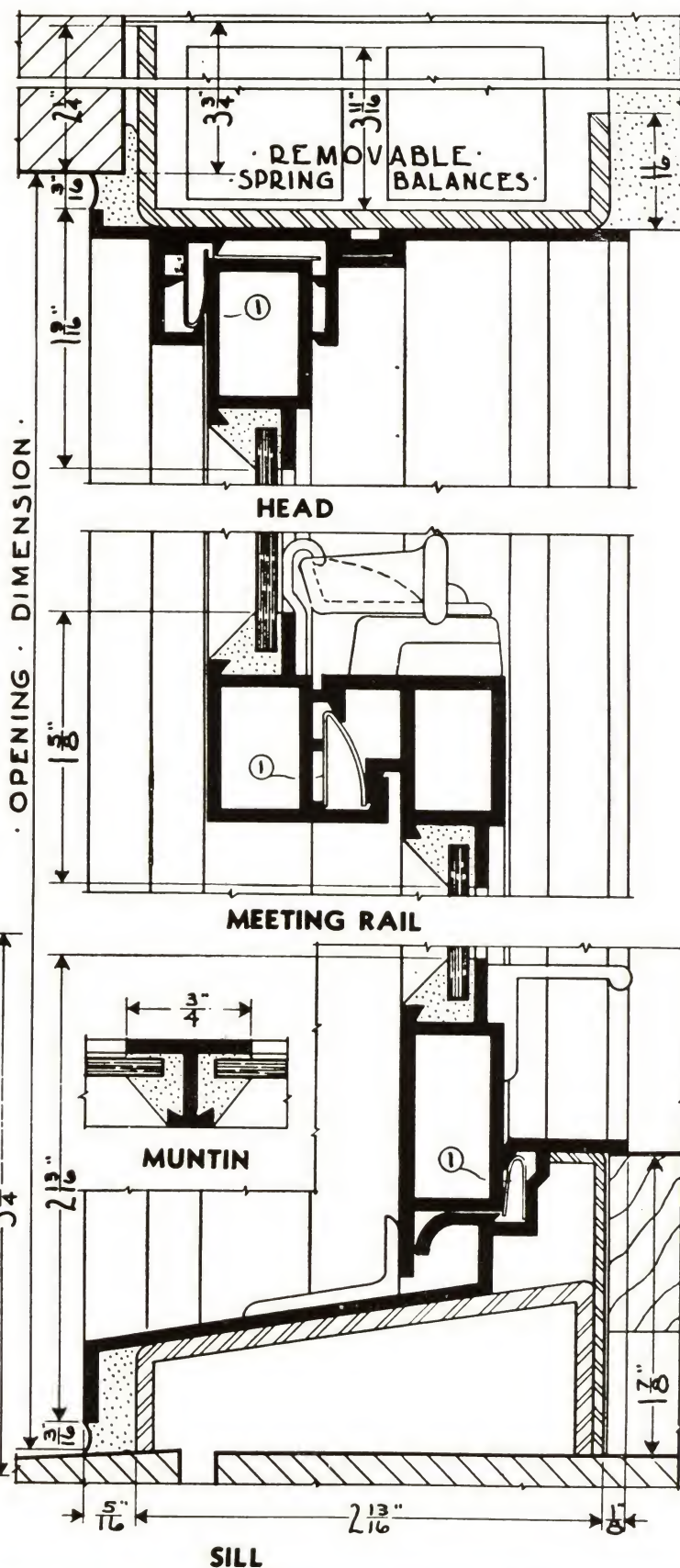
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Write for details of heavier types.



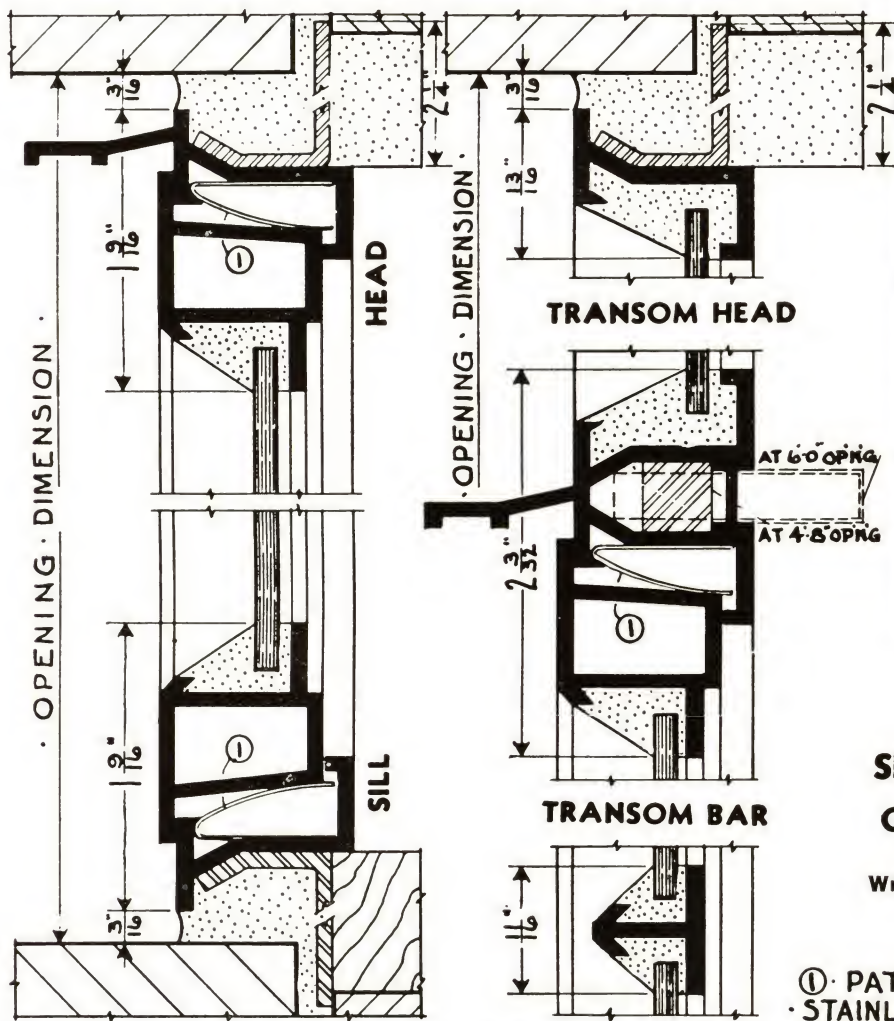
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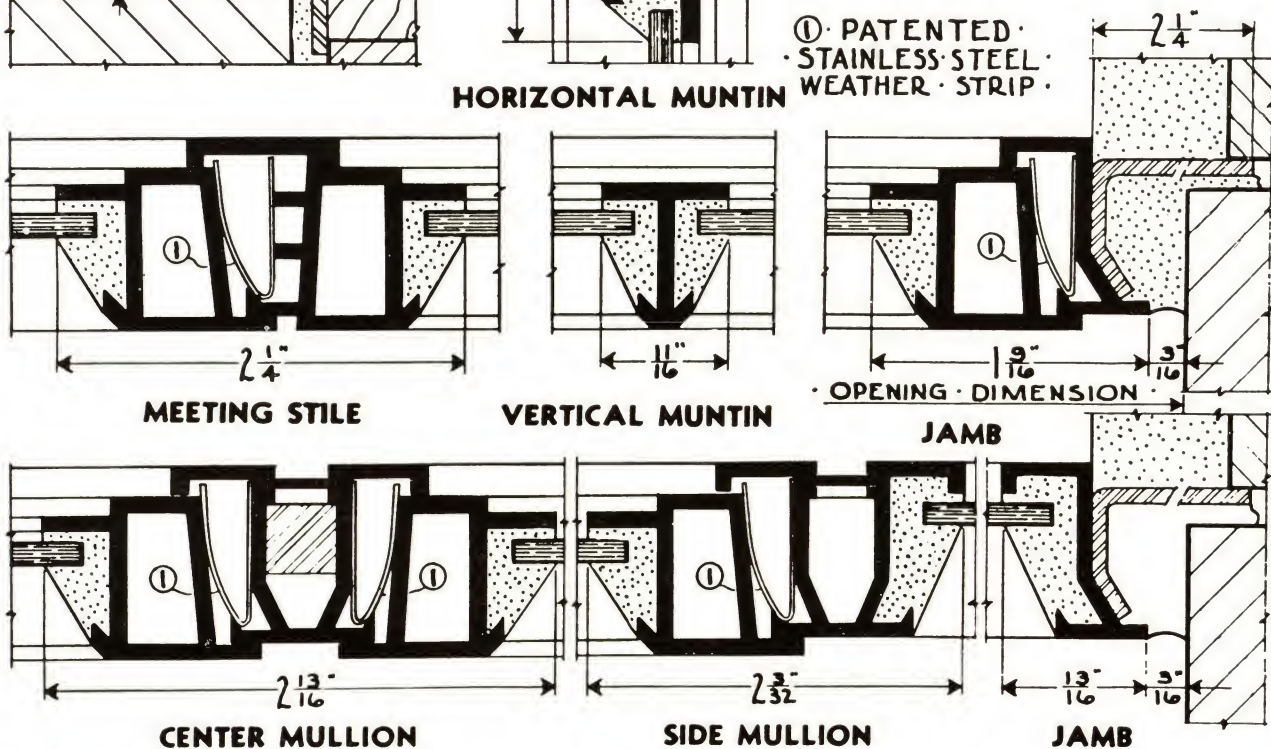
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PERMATITE WINDOWS



SERIES K1 ALUMINUM CASEMENT WINDOW

Write for details of heavier types.



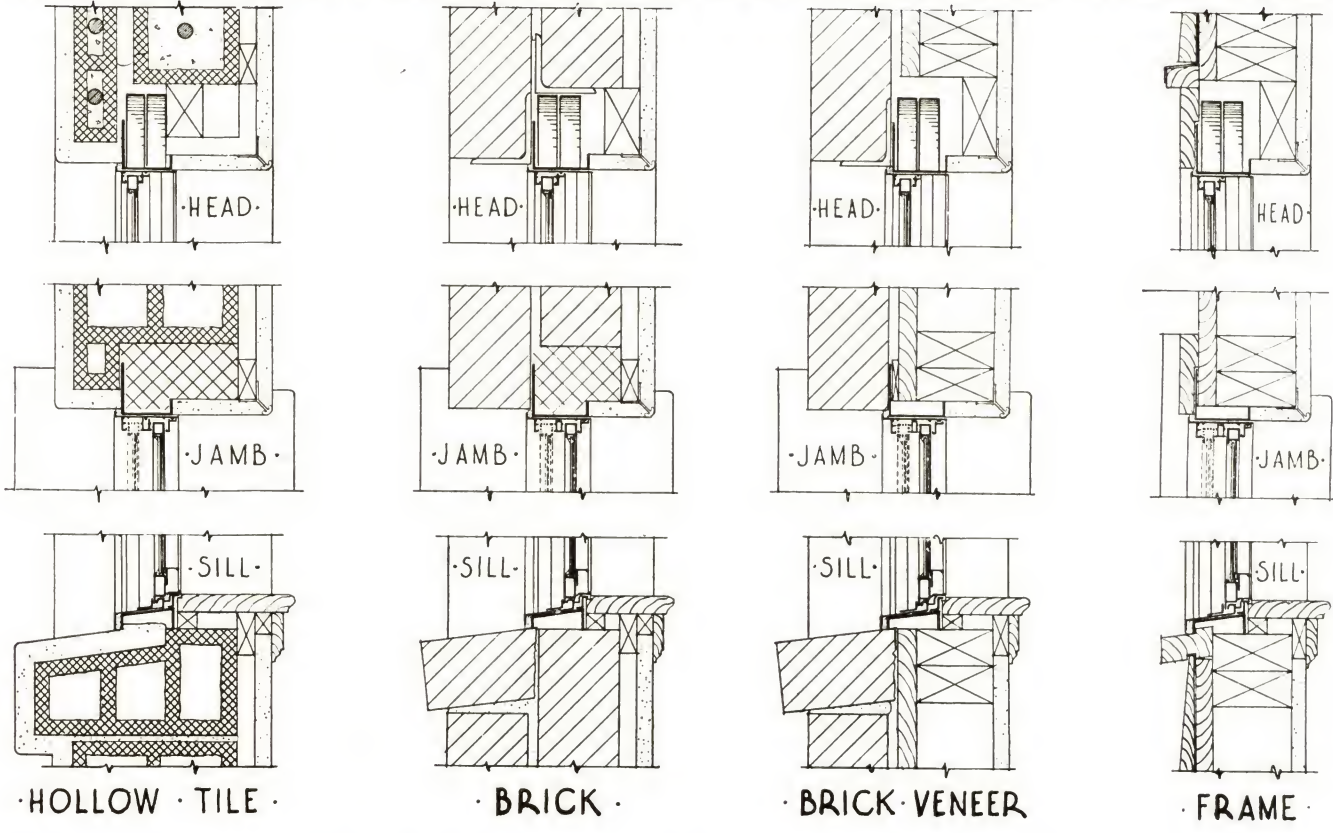
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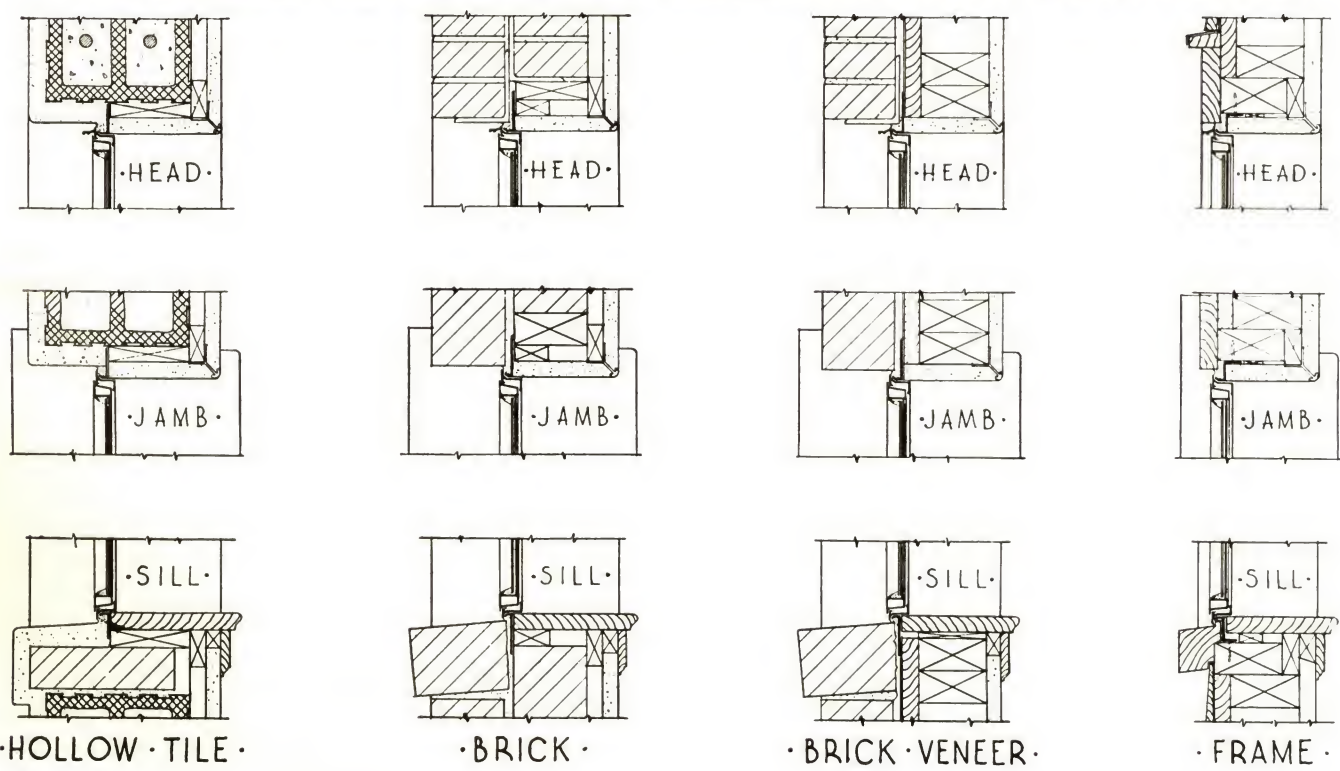
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INSTALLATION DETAILS FOR DOUBLE HUNG WINDOWS



INSTALLATION DETAILS FOR CASEMENT WINDOWS



GENERAL BRONZE CORPORATION

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STANDARD SPECIFICATIONS..DOUBLE HUNG WINDOWS

1. Scope of Work: This contractor shall furnish PERMATITE Series "H" bronze (or aluminum) Double Hung Windows, including all hardware and steel sub-frames, as manufactured by General Bronze Corporation, Long Island City, New York, for all window openings shown on Architect's drawings for (Here insert extent of windows which are to be bronze or aluminum.)

2. Materials: Except as is hereinafter specified, all parts of window frames and sash shall be of solid bronze (or aluminum). All frame members shall be extruded bronze (or aluminum) not less than #12 B & S gauge. Stiles and rails of all sash shall be of seamless bronze tubing of #17 B & S gauge (or if aluminum of #12 B & S gauge).

Finished members of sash and frames shall be true to dies and all moulded sections shall have clean sharp arrises, free from twists, bends or other imperfections. After extrusion, each piece shall be drawn through forming dies to insure absolute straightness and uniform thickness throughout its length.

Weatherstripping shall be of hard resilient special metal alloy of the required thickness to resist movement from the pressure exerted by wind at a velocity of 60 miles per hour.

Each window shall be provided with steel sub-frame, formed into special channel shape from #12 U. S. gauge blue annealed sheet; welded at corners into a continuous frame.

3. Design, Construction and Workmanship: Jamb, head and sill members of frames shall be designed to provide integrally formed pockets to receive and retain the metal weatherstripping in such manner that no raw edge of same will be exposed. Weatherstripping at jambs and head shall be so formed and positioned as to provide two continuous lines of flexible but positively sealing contact between frame and closed sash without in any way binding the sash when operated. Similar weatherstrips shall be housed in the sill of the frame and in the meeting rail of the upper sash to form continuous sealed contact with top and bottom rails of lower sash. Weatherstripping and its housings shall be so formed that strips may be readily removed or replaced without dismantling the window.

Tubular stiles and rails of sash shall be seamless, designed with overlapping flanges to effect face contacts with the frame members and so formed as to provide a continuous wedge shaped groove all around the sash opening to effectively key the glazing putty in its bed and permanently retain it in place. The design of the sash and their engagement with the frames shall be such as to prevent the sash from rattling when in any position.

The outer flange of the steel channel sub-frames shall be extended to form a continuous fin or weather stop for the entire extent of the window jambs and head. Provide holes at proper spacings in these extended flanges to receive built-in anchors or

bolts, for anchoring windows to the walls. Removable access plates shall be provided in the heads of all window frames and sub-frames to afford access to sash balances.

All joints, copes and miters shall be precision machined and carefully fitted to create tight, hairline joints. All holes, slots, etc., shall be accurately drilled to template and holes for machine screws carefully tapped. Removable members such as parting strips, guide stops, access plates, etc., shall be accurately machined and shop fitted. All screws, bolts and rivets shall be made from special alloys to provide maximum strength at fastenings and, where exposed, shall match window material in color.

All material shall be carefully inspected before assembly to insure same has been accurately and thoroughly prepared. All surfaces of sub-frames shall be given a heavy coat of bitumastic paint before attaching non-ferrous frame members to same. Finish jambs, heads, and sills are to be riveted to corresponding members of sub-frames under pressure; then assembled into complete frame units by solidly welding each corner. After welding, all corners shall be filled with leak proof compound under 100 lb. air pressure. Stiles and rails of sash shall be assembled by welding or sweating together at corners which shall first be heavily reinforced. Ample reinforcements shall be built into the sash to receive the hardware.

Removable members shall be secured by special head machine screws of proper size and approved spacings. All other fastenings of exposed members shall be fully concealed.

(NOTE: If required, the following should also be included.)

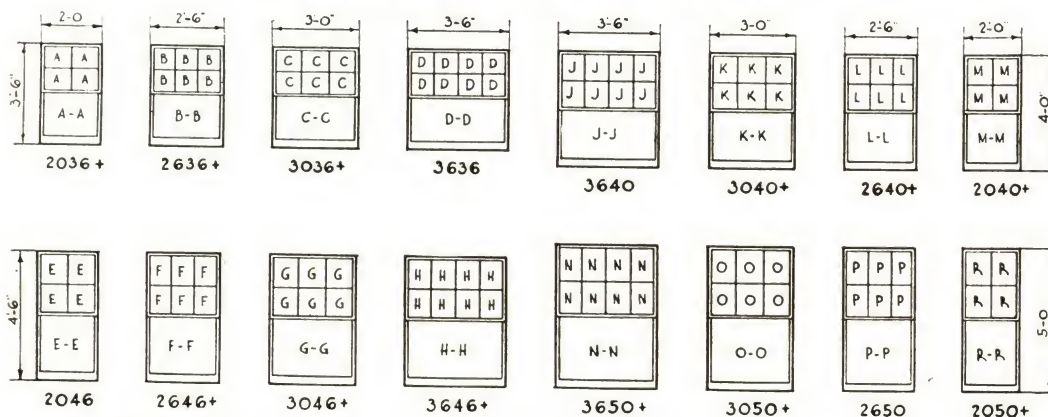
Provide muntins, arranged as shown, neatly and accurately fitted and assembled at the shop. Intersections of muntins and between muntins and sash members shall be fully lapped to insure firm engagement.

Provide, where shown, mullions between double-hung units amply and continuously reinforced with steel to insure rigidity. All contacts between mullions and steel reinforcements shall be fully insulated by an extra heavy coat of bitumastic paint, applied before mullion is assembled. Mullion jambs shall fully correspond with jambs hereinbefore specified.

4. Hardware: Each double hung window shall be equipped with four (4) completely housed adjustable sash balances, mounted within the head of the frame in such manner that the weight of the sash is not sustained by the fastening screws. Pulley tapes shall be of special alloy bronze to safely meet all strains to which they may be subjected. (If windows are aluminum, pulley tapes shall be of white metal.) All other parts of sash balances shall be of steel. Balances shall be removable. Sash tapes shall be firmly attached to sash rails by specially designed fasteners.

Each pair of double hung sash shall be fitted with solid bronze hardware consisting of the following: two sash lifts, one sash lock, one sash pull, two sash bumpers for upper sash, and two

PERMATITE DOUBLE HUNG WINDOWS STANDARD SIZES OF SERIES H & H2



NOTE: Dimensions given are sizes of openings. Muntins may be omitted or arranged as preferred on special order. Types marked thus + stocked in Long Island City, N. Y., warehouse.

GLASS SIZES			
A	10 $\frac{9}{16}$ x 9 $\frac{1}{16}$	A-A	21 $\frac{3}{8}$ x 18 $\frac{5}{16}$
B	8 $\frac{15}{16}$ x 9 $\frac{1}{16}$	B-B	27 $\frac{3}{8}$ x 18 $\frac{5}{16}$
C	10 $\frac{15}{16}$ x 9 $\frac{1}{16}$	C-C	33 $\frac{3}{8}$ x 18 $\frac{5}{16}$
D	9 $\frac{5}{8}$ x 9 $\frac{1}{16}$	D-D	39 $\frac{3}{8}$ x 18 $\frac{5}{16}$
E	10 $\frac{9}{16}$ x 12 $\frac{1}{16}$	E-E	21 $\frac{3}{8}$ x 24 $\frac{5}{16}$
F	8 $\frac{15}{16}$ x 12 $\frac{1}{16}$	F-F	27 $\frac{3}{8}$ x 24 $\frac{5}{16}$
G	10 $\frac{15}{16}$ x 12 $\frac{1}{16}$	G-G	33 $\frac{3}{8}$ x 24 $\frac{5}{16}$
H	9 $\frac{5}{8}$ x 12 $\frac{1}{16}$	H-H	39 $\frac{3}{8}$ x 24 $\frac{5}{16}$
J	9 $\frac{5}{8}$ x 10 $\frac{3}{16}$	J-J	39 $\frac{3}{8}$ x 21 $\frac{5}{16}$
K	10 $\frac{15}{16}$ x 10 $\frac{3}{16}$	K-K	33 $\frac{3}{8}$ x 21 $\frac{5}{16}$
L	8 $\frac{15}{16}$ x 10 $\frac{3}{16}$	L-L	27 $\frac{3}{8}$ x 21 $\frac{5}{16}$
M	10 $\frac{9}{16}$ x 10 $\frac{3}{16}$	M-M	21 $\frac{3}{8}$ x 21 $\frac{5}{16}$
N	9 $\frac{5}{8}$ x 13 $\frac{3}{16}$	N-N	39 $\frac{3}{8}$ x 27 $\frac{5}{16}$
O	10 $\frac{15}{16}$ x 13 $\frac{3}{16}$	O-O	33 $\frac{3}{8}$ x 27 $\frac{5}{16}$
P	8 $\frac{15}{16}$ x 13 $\frac{3}{16}$	P-P	27 $\frac{3}{8}$ x 27 $\frac{5}{16}$
R	10 $\frac{9}{16}$ x 13 $\frac{3}{16}$	R-R	21 $\frac{3}{8}$ x 27 $\frac{5}{16}$

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combination bumpers and tape hooks for lower sash. For aluminum windows, finish hardware shall be dull chrome plated to match aluminum.

5. **Shop Drawings:** Before proceeding with the work, this contractor shall prepare and submit, for Architect's approval, complete shop drawings showing all parts of the frames and sash and fully dimensioned. Shop drawings shall be submitted in triplicate and no work shall be proceeded with until Architect's approval has been received.
6. **Infiltration Tests:** All double hung windows shall be so designed and constructed that, when subjected to an air pressure equivalent to that exerted by wind at a velocity of twenty-five (25) miles per hour, the infiltration of air through the window shall not exceed one-third ($\frac{1}{3}$) of one cubic foot per minute per linear foot of sash perimeter. One window will be selected at random by the Architect and subjected to this infiltration test. If the first sample shall fail to meet the test, a second will be similarly selected and tested. If it also fails, the Architect may, in his discretion, reject all the windows made, and require new windows to be furnished which will fulfill all the above requirements. All infiltration tests shall be at the expense of this contractor.

The Architect may, but shall not be required to, waive infiltration tests on windows, provided the manufacturer thereof can furnish certified reports of tests, made by a testing laboratory approved by the Federal Government, showing that windows made by the manufacturer of the same type and design as are being furnished on this project have met or exceeded the requirements hereinabove specified.

7. **Protection:** Before shipment, this contractor shall apply an approved protective solution to all exposed surfaces of the frame and sash in order to protect the metal from plaster, etc. The General Contractor shall be required to provide proper protection to the windows to prevent damage during the course of operations and shall remove the same before final inspection and cleaning down of the windows is started.

FINAL: Complete instructions will be mailed at the time of shipment of windows for the proper setting, caulking, grouting, glazing, cleaning and adjustment of the windows. *Note that $\frac{1}{8}$ " thick glass should be used and same should be set with a good grade of metal glazing putty.* A sufficient quantity of special glazing clips will be furnished with the windows, without charge.

STANDARD SPECIFICATIONS . . CASEMENT WINDOWS

1. **Scope of Work:** This contractor shall furnish PERMATITE Series "K" bronze (or aluminum) Casement Windows, including all hardware and steel sub-frames, as manufactured by General Bronze Corporation, Long Island City, New York, for all window openings shown on Architect's drawings for.....

(Here insert extent of windows which are to be bronze or aluminum.)

2. **Materials:** Except as is hereinafter specified, all parts of window frames and sash shall be of solid bronze (or aluminum). All frame members shall be extruded bronze (or aluminum) not less than #12 B & S gauge. Stiles and rails of all sash shall be of seamless bronze tubing of #17 B & S gauge (or if aluminum of #12 B & S gauge).

Finished members of sash and frames shall be true to dies and all moulded sections shall have clean sharp arrises, free from twists, bends or other imperfections. After extrusion, each piece shall be drawn through forming dies to insure absolute straightness and uniform thickness throughout its length.

Weatherstripping shall be of hard resilient special metal alloy of the required thickness to resist movement from the pressure exerted by wind at a velocity of 60 miles per hour.

Each window shall be provided with steel sub-frame, formed into special angle shape from #12 U. S. gauge blue annealed sheet; welded at corners into a continuous frame.

3. **Design, Construction and Workmanship:** Jamb, head and sill members of frames shall be designed to provide integrally formed pockets to receive and retain the metal weatherstripping in such manner that no raw edge of same will be exposed. Weatherstripping at jambs, sill and head shall be so formed and positioned as to provide continuous lines of flexible but positively sealing contact between frame and closed sash without in any way binding the sash when operated. A similar weatherstrip shall be housed in the meeting stile of the sash to also form continuous contact. Weatherstrips and their housings shall be so formed that strips may be readily removed or replaced without dismantling the window.

Stiles and rails of sash shall be seamless tubing, designed with overlapping flanges to effect face contacts with the frame members

and so formed as to provide a continuous wedge shaped groove all around the glass opening, to effectively key the glazing compound in its bed and permanently retain it in place. The design of the sash and their engagement with the frames shall be such as to prevent any rattling.

The free leg of the steel angle sub-frames shall be extended to form a continuous fin or weather stop for the entire extent of the window jambs and head. Provide holes at proper spacing in this leg to receive built-in anchors or bolts to attach the windows to the building structure.

All joints, copes and miters shall be precision machined and carefully fitted to create tight, hairline joints. All holes, slots, etc., shall be accurately drilled to template and holes for machine screws carefully tapped. All screws, bolts and rivets shall be made from special alloys to provide maximum strength at fastenings and where exposed shall match window material in color.

All material shall be carefully inspected before assembly to insure same has been accurately and thoroughly prepared. All surfaces of sub-frames shall be given a heavy coat of bitumastic paint before attaching non-ferrous frame members to same. Jambs, heads and sills are to be riveted to corresponding steel sub-frames under pressure, then assembled into complete frame units by solidly welding each corner. After welding, all corners shall be filled with leak proof compound under 100 lb. air pressure.

Stiles and rails of sash shall be assembled by welding or sweating together at corners which shall first be heavily reinforced. Ample reinforcements shall be built into the sash to receive the hardware.

Removable members and hardware shall be secured by special head machine screws of proper size and approved spacings. All other fastenings of exposed members shall be fully concealed.

(NOTE: If required, the following should also be included).

Provide muntins, arranged as shown, neatly and accurately fitted and assembled at the shop. Intersections of muntins and between muntins and sash members shall be fully lapped to insure firm engagement.

Provide, where shown, mullions between window units amply and continuously reinforced with steel to insure rigidity. All contacts between mullions and steel reinforcements shall be fully insulated by an extra heavy coat of bitumastic paint, applied before mullion is assembled. Mullion jambs shall correspond in



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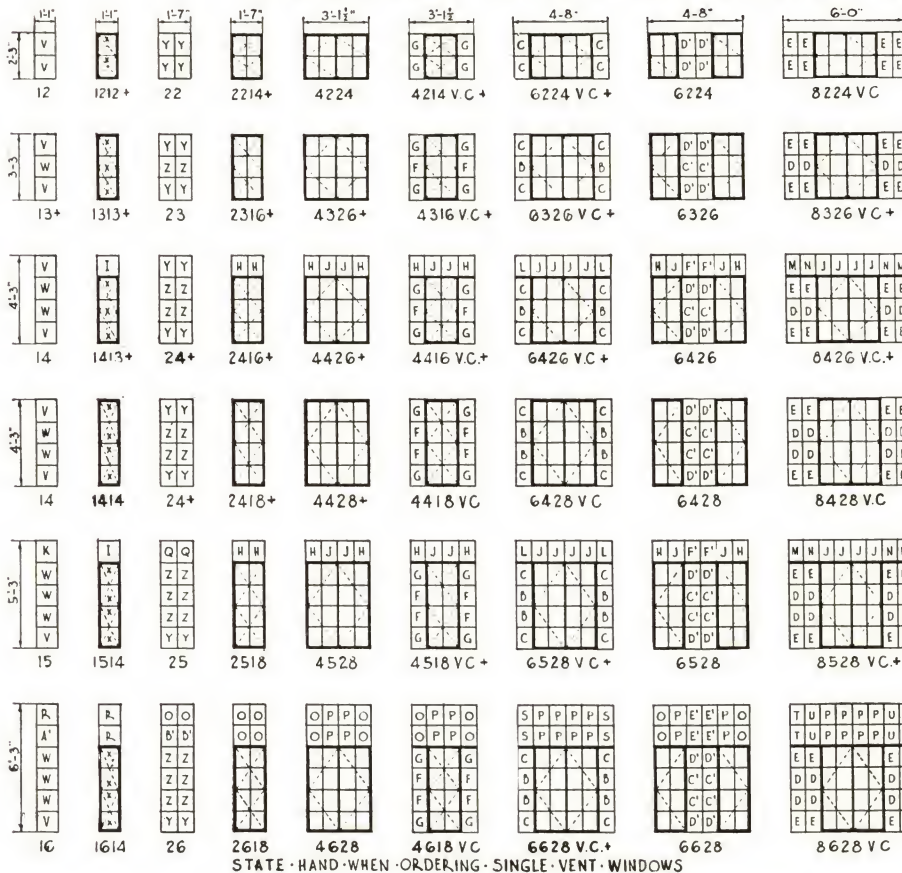
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PERMATITE CASEMENT WINDOWS

STANDARD SIZES OF SERIES K AND K1



NOTE: Dimensions given are sizes of openings. Windows with single vents are made either right or left hand, viewed from outside. V.C. vent in center. Types marked thus + stocked in Long Island City, N. Y., warehouse.

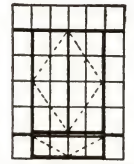
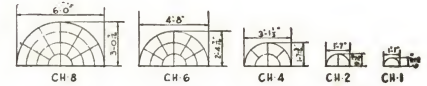


ILLUSTRATION OF VENTILATOR 6154 V.C. APPLIED TO SASH 6528 V.C.



GLASS SIZES

A	7 1/8 x 11 13/16	L	8 1/4 x 11 5/8	W	11 1/2 x 11 13/16
B	8 7/16 x 11 13/16	M	8 1/4 x 11 5/8	X	10 1/4 x 11 13/16
C	8 7/16 x 12 3/16	N	8 5/8 x 11 5/8	Y	8 5/8 x 12 5/8
D	8 7/16 x 11 13/16	O	8 5/8 x 11 5/8	Z	8 5/8 x 11 13/16
E	8 5/8 x 12 3/16	P	8 5/8 x 11 7/16	A'	11 1/2 x 12 3/4
F	8 5/8 x 11 13/16	Q	8 5/8 x 12 1/2	B'	8 5/8 x 12 3/4
G	8 5/8 x 12 3/16	R	11 1/2 x 11 13/16	C'	8 5/8 x 11 13/16
H	8 5/8 x 11 1/8	S	8 3/4 x 11 7/16	D'	8 5/8 x 12 3/4
I	11 1/2 x 11 5/8	T	8 5/8 x 11 13/16	E'	9 x 11 7/16
J	8 5/8 x 11 5/8	U	8 5/8 x 11 13/16	F'	9 x 11 5/8
K	11 1/2 x 12 1/2	V	11 1/2 x 12 5/8		

LIGHTS - NOT - LETTERED ARE - SIZE "A"

Muntins may be omitted or arranged as preferred on special order.

every particular with design of window jambs as hereinbefore specified.

4. Hardware:

Each casement window sash shall be equipped with the following hardware all of which shall be of solid bronze except where otherwise noted herein:

For non-screen type; each sash shall have one pair of projected adjustable friction type hinges and one lever handled multiple cam lock.

For screen type; each sash shall have one pair projected non-friction type hinges, one lever handled locking device with single or multiple bolt and keeper and one worm and gear type sash operator.

NOTE: For aluminum windows all bronze hardware shall be dull chrome plated to match aluminum, except worm and gear sash operators for aluminum windows shall be of special white metal alloy, die cast, with solid bronze sleeve on handle.

5. Shop Drawings:

Before proceeding with the work, this contractor shall prepare and submit, for Architect's approval, complete shop drawings showing all parts of the frames and sash and fully dimensioned. Shop drawings shall be submitted in triplicate and no work shall be proceeded with until Architect's approval has been received.

6. Infiltration Tests:

All casement windows shall be so designed and constructed that, when subjected to an air pressure equivalent to that exerted by wind at a velocity of twenty-five (25) miles per hour, the infiltration of air through the window shall not exceed one-fourth (1/4) of one cubic foot per minute per linear foot of sash perimeter. One window will be selected at

random by the Architect and subjected to this infiltration test. If the first sample shall fail to meet the test, a second will be similarly selected and tested. If it also fails, such failure shall be sufficient grounds for the Architect, in his discretion, to reject all the windows made, and require new windows to be furnished which will fulfill all the above requirements. All infiltration tests shall be at the expense of this contractor.

The Architect may, but shall not be required to, waive infiltration tests on windows, provided the manufacturer thereof can furnish certified reports of tests, made by a testing laboratory approved by the Federal Government, showing that windows made by the manufacturer of the same type and design as are being furnished on this project have met or exceeded the requirements hereinabove specified.

7. Protection:

Before shipment, this contractor shall apply approved protective solution to all exposed surfaces of the frame and sash in order to protect the metal from plaster, etc. The General Contractor shall be required to provide proper protection to the windows to prevent damage during the course of operations and shall remove the same before final inspection and cleaning down of the windows is started.

FINAL: Complete instructions will be mailed at the time of shipment of windows for the proper setting, caulking, grouting, glazing, cleaning and adjustment of the windows. Note that 1/8" thick glass should be used and same should be set with a good grade of metal glazing putty. A sufficient quantity of special glazing clips will be furnished with the windows, without charge.

GENERAL BRONZE CORPORATION

34-19 TENTH STREET LONG ISLAND CITY, N.Y.

Architectural Metal Work • Windows • Revolving Doors • Tablets





NEW YORK LIFE INSURANCE CO., NEW YORK, N. Y.
Cass Gilbert, Architect. 2600 Windows by General Bronze

POLACHEK WINDOWS

DOUBLE HUNG AND CASEMENT (PATENTED)

BRONZE OR ALUMINUM

FOR HEAVY DUTY REQUIRED IN MONUMENTAL BUILDINGS

Special Features

... Rigid construction and exact alignment which prevent binding on the vertical movement, and lever type lifts to break contact at the sill. A concealed device, built into the side stiles and instantly adjustable, prevents all lateral movement of sash when in any position.

Weatherstripping is formed through steel dies as an integral part of main sash and frame members and to the same thickness. The University of Wisconsin tests prove the effectiveness of this sealing. Immovable from its initial

position, too heavy to bend, too thick to wear out, this weatherstripping can never lose its effectiveness.

Careful designing of self-reinforced members has reduced face widths to the minimum compatible with rigid construction requirements.

Pulleys and chain are readily replaceable. Sash and frame, being of extra heavy non-ferrous metal, and so fitted and assembled that no joint can ever open or leak, will outlast the useful life of the building without repairs, replacements or painting.

BRIEF DESCRIPTION OF THE POLACHEK PATENTED DOUBLE HUNG AND CASEMENT WINDOWS

The POLACHEK Patented Double Hung Window, owned and manufactured exclusively by General Bronze Corporation, is air-tight, weatherproof, rattle-proof, non-rusting, permanent and quiet in operation. Salient patent features are a series of accurately-matched integral wedge-shaped tongues and grooves, effecting positive multiple contacts throughout the perimeter of both sashes when closed, and adjustable devices concealed within the sash construction which effectively prevent sash rattling while in any position.

The design of the window is simple, dignified and architecturally correct. Frame and Sash are so designed as to combine sufficient strength with the maximum obtainable of daylight opening. Sash provided for glazing from inside. Construction is rigid and permanent. Mitres, copes, tenons,

and all other inter-sections are precision machined; members are carefully fitted and assembled, and each unit thoroughly inspected before assembly. Workmanship is assured through employment of artisans trained in handling fine ornamental bronze work.

STANDARD EQUIPMENT: General Bronze Hardware is standard for all casements. Attractive, sturdy and efficient, it harmonizes perfectly with this most attractive type of window. Note particularly the absence of extreme projections and the general compactness of operating and engaging parts, not obtainable in other makes.

Complete architectural specifications and details will be supplied on request.



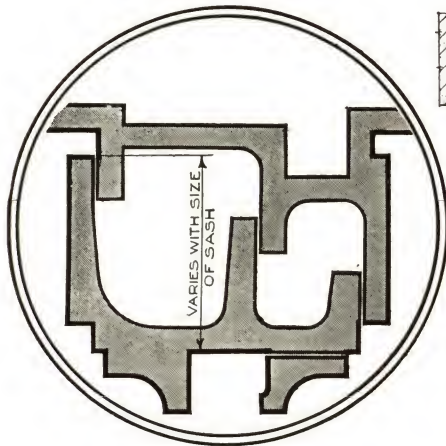
GENERAL BRONZE CORPORATION

34 · 19 TENTH STREET LONG ISLAND CITY, N.Y.

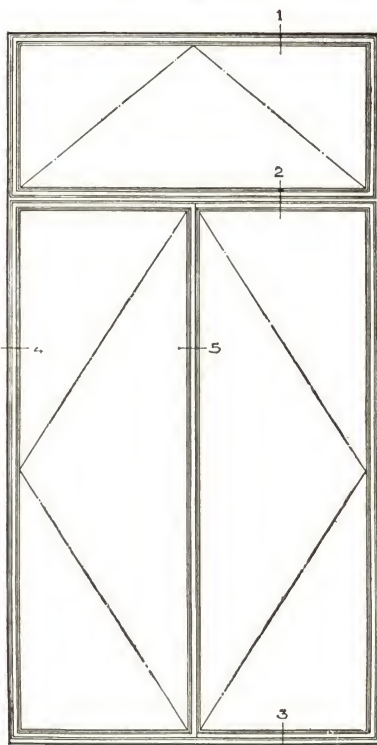
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DETAILS . . . TYPE "A" POLACHEK CASEMENT WINDOWS

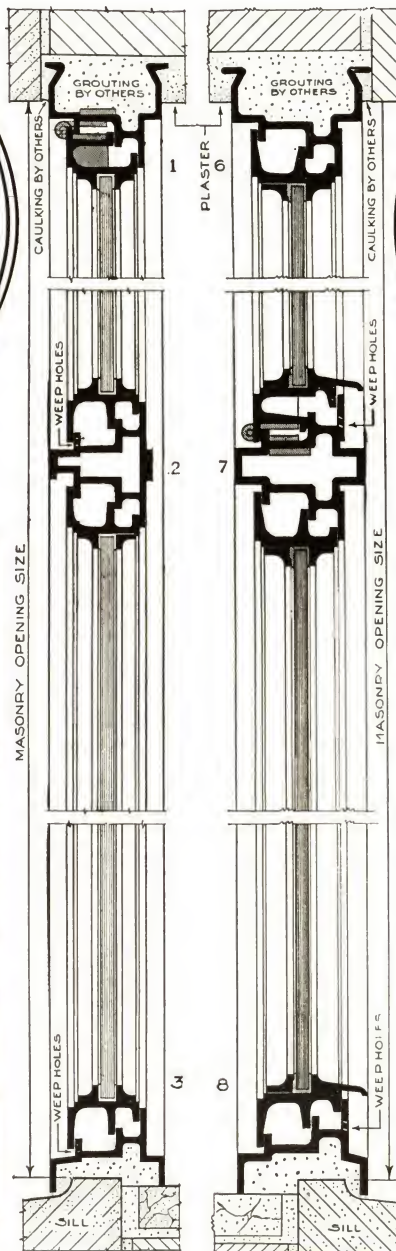
F.S. DETAIL



TYPE "A1"

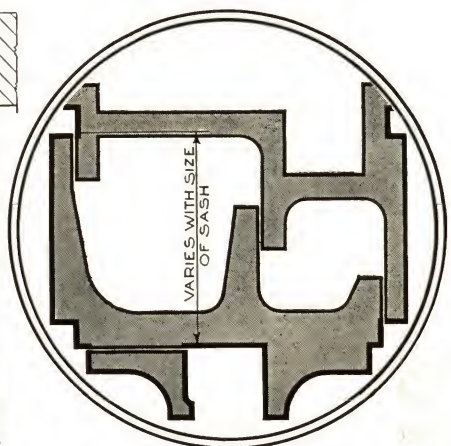


TYPE A1
3 POINT CONTACT OPEN SECTION
CASEMENT WINDOW

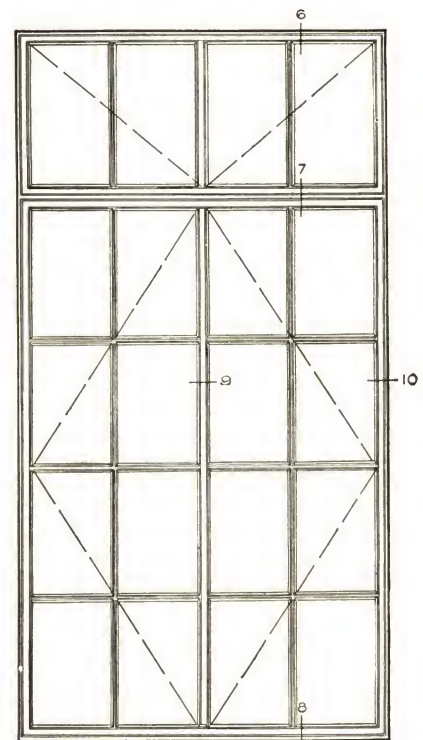


SECTION

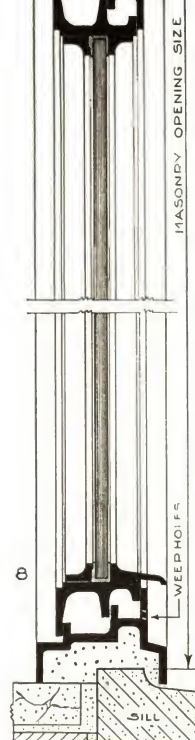
F.S. DETAIL



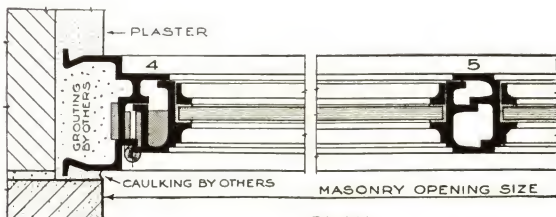
TYPE "A2"



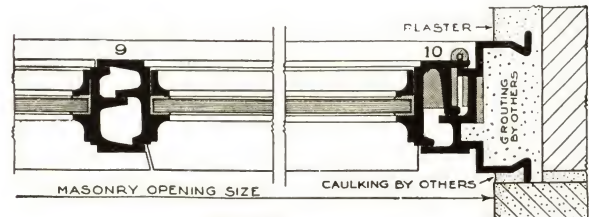
TYPE A2
3 POINT CONTACT OPEN SECTION
CASEMENT WINDOW



SECTION



PLAN
CASEMENT WINDOW SWINGING OUT,



PLAN
CASEMENT WINDOW SWINGING IN



GENERAL BRONZE CORPORATION

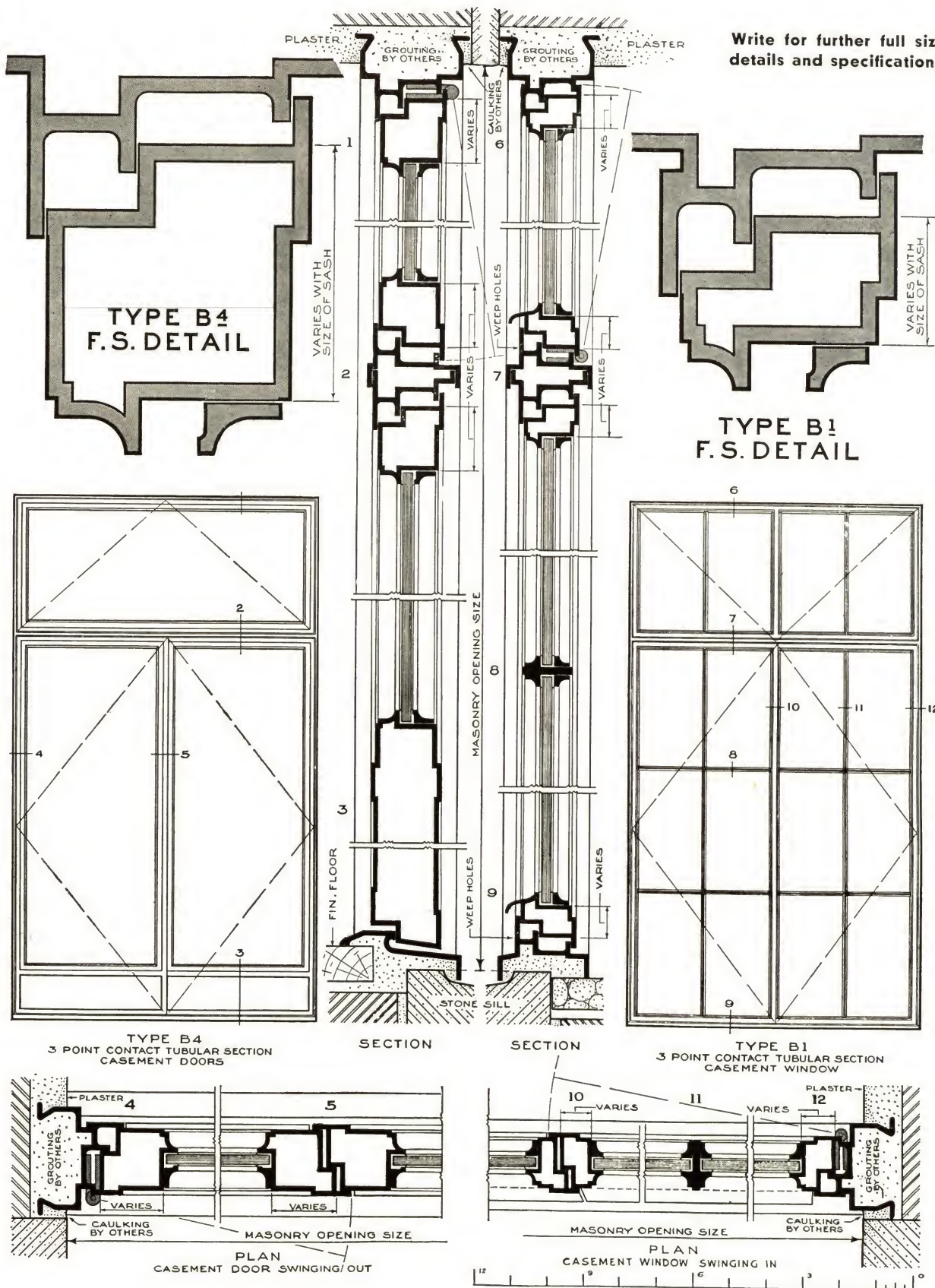
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DETAILS . . . TYPE "B" POLACHEK CASEMENT DOOR & WINDOWS

Write for further full size details and specifications.



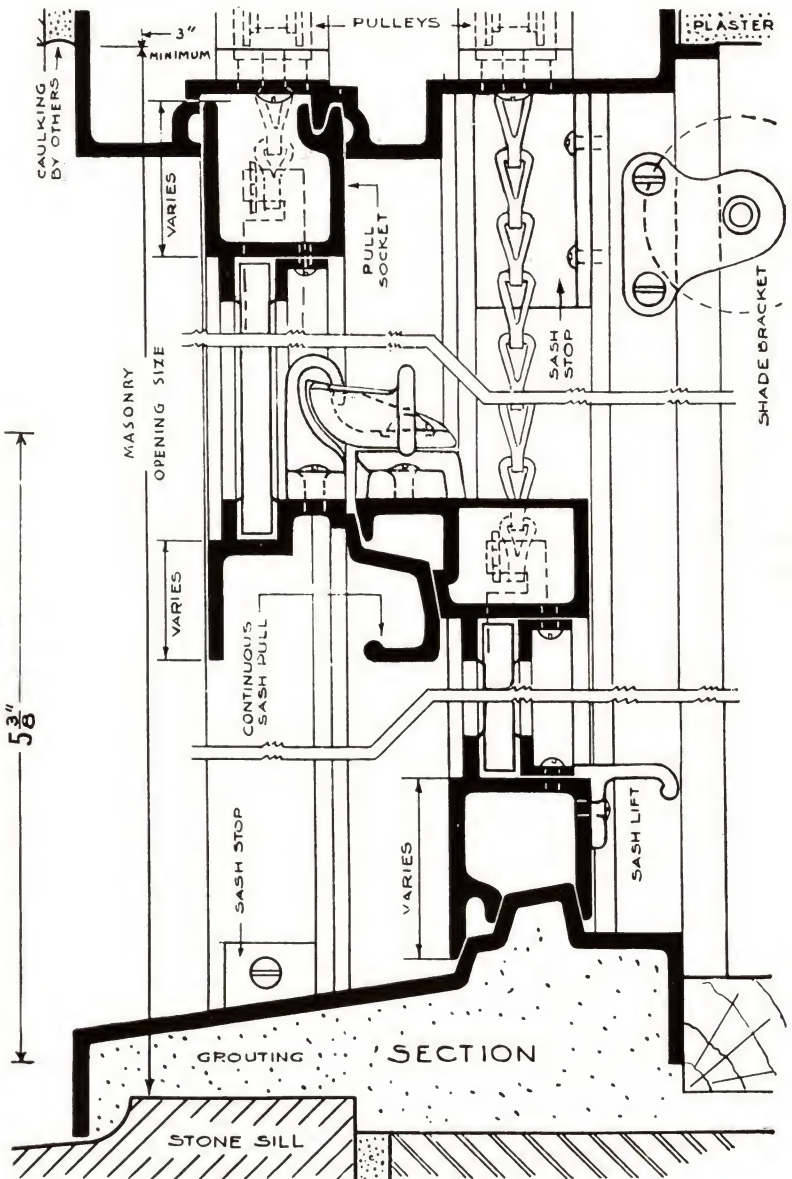
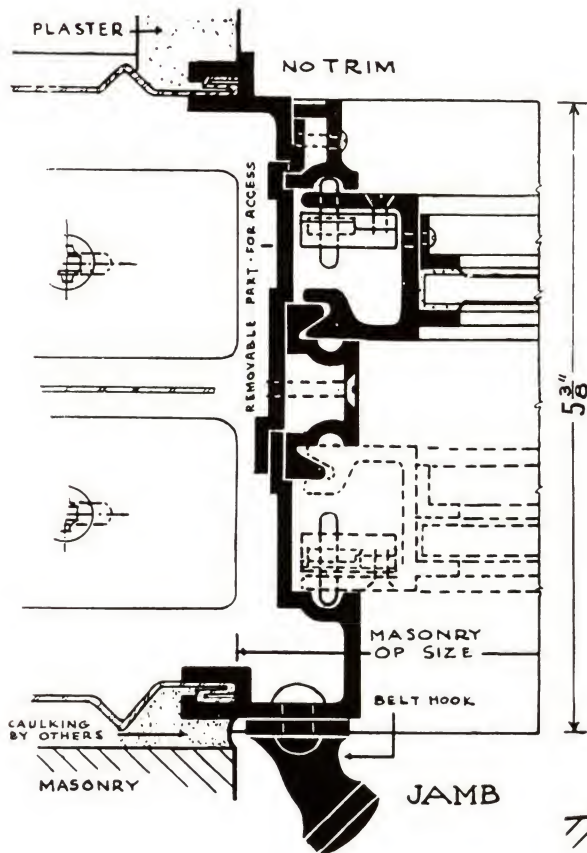
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POLACHEK DOUBLE HUNG WINDOWS

Write for dimensioned details.



PARTIAL LIST OF WINDOW INSTALLATIONS

BUILDING	LOCATION	ARCHITECTS
U. S. Supreme Court Building	Washington, D. C.	Cass Gilbert, Cass Gilbert, Jr. & J. R. Rockart & David Lynn, Archts. of the Capitol
U. S. Post Office Dept. Building	Washington, D. C.	Delano & Aldrich
Mitsui Main Building	Tokyo, Japan	Trowbridge & Livingston
Northwestern Mutual Life Ins. Co.	Milwaukee, Wis.	Holabird & Root
Mutual Benefit Life Ins. Co.	Newark, N. J.	John H. & Wilson C. Ely
U. S. Post Office, Court House & Customs, Etc.	Detroit, Mich.	Robert O. Derrick, Inc. & U. S. Supervising Archt.
Nebraska State Capitol Building	Lincoln, Neb.	Bertram Goodhue Associates
New York County Court House	New York, N. Y.	Guy Lowell
Federal Reserve Board	Washington, D. C.	Paul P. Cret
State Capitol Building	Salem, Ore.	Trowbridge & Livingston, Francis Keally, Assoc. Architects
Apt. House, 72nd St. & Madison Ave.*	New York, N. Y.	Mott B. Schmidt & Rosario Candela
St. Luke's Hospital—Nurses Home	New York, N. Y.	York & Sawyer
Wm. K. Vanderbilt, Residence	Palm Beach, Fla.	Treanor & Fatio
Arthur C. Nielsen, Residence	Winnetka, Ill.	Benjamin H. Marshall Co.
Franklin B. Kirkbride, Residence*	New Canaan, Conn.	Robertson Ward
Hospital for Chronic Diseases	Welfare Island, N. Y.	Butler & Kohn, York & Sawyer
Julian Street, Jr., Residence	Scarborough, N. Y.	Harrison & Foulhoux
Oregon State Library	Salem, Ore.	Whitehouse & Church
Doris Duke Cromwell, Residence	Honolulu, Hawaii	Wyeth & King

*Picture on outside cover.

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P. H. BUTLER, *Architect*



ROBERTSON WARD, *Architect*



LAWRENCE C. LIGHT, *Architect*

BRONZE OR
ALUMINUM

CASEMENT OR
DOUBLE HUNG

WINDOWS
by



GENERAL BRONZE CORPORATION

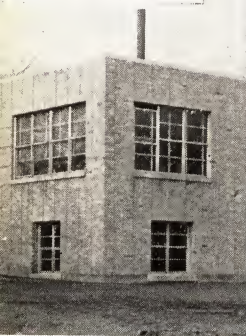
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LONG ISLAND CITY, N.Y.

SMITH, HINCHMAN and GRYLLS, INC., *Architects*



S. FIRESTONE, *Architect*



YORK and SAWYER, BUTLER and KOHN, *Associated Architects*

WELFARE ISLAND HOSPITAL GROUP, New York City



SLEE and BRYSON, *Architects*



JULIUS GREGORY, *Architect*